

Title (en)
ELASTICITY DETECTION METHOD AND DEVICE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ERKENNUNG VON ELASTIZITÄT

Title (fr)
PROCÉDÉ ET DISPOSITIF DE DÉTECTION D'ÉLASTICITÉ

Publication
EP 3369382 A4 20181226 (EN)

Application
EP 16859040 A 20161027

Priority
• CN 201510718719 A 20151029
• CN 2016103485 W 20161027

Abstract (en)
[origin: US2017311929A1] Disclosed are a method and a device for elasticity detection. The method comprises: controlling an excitation device (2) to periodically excite N shear waves in a tissue at a preset time interval and controlling an ultrasonic transducer (3) to transmit ultrasonic waves (101) to the tissue, where the excitation device and the ultrasonic transducer are maintained in contact with a surface of the tissue; receiving, by the ultrasonic transducer (3), an ultrasonic echo signal (102) corresponding to each of the shear waves; acquiring a propagation characteristic parameter (103) of each of the shear waves according to the ultrasonic echo signal corresponding to each of the shear waves; calculating an elasticity parameter of the tissue (104) according to propagation characteristic parameters of the N shear waves and a tissue density of the tissue.

IPC 8 full level
A61B 8/08 (2006.01); **A61B 8/00** (2006.01)

CPC (source: EP KR RU US)
A61B 8/08 (2013.01 - KR); **A61B 8/485** (2013.01 - EP KR RU US); **A61B 8/5207** (2013.01 - KR); **A61B 8/5223** (2013.01 - EP KR RU US); **A61B 8/54** (2013.01 - EP KR RU US); **G01S 7/52042** (2013.01 - EP US); **G16H 50/30** (2018.01 - EP); **A61B 8/08** (2013.01 - EP US); **A61B 8/5207** (2013.01 - EP US)

Citation (search report)
• [X] US 2013317362 A1 20131128 - SHI YAN [US], et al
• [A] US 2011319756 A1 20111229 - ZHENG YI [US], et al
• See also references of WO 2017071605A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 11426144 B2 20220830; US 2017311929 A1 20171102; AU 2016347143 A1 20170824; AU 2016347143 B2 20180329; BR 112017023279 A2 20181106; BR 112017023279 B1 20221025; CN 105212968 A 20160106; CN 105212968 B 20190104; EP 3369382 A1 20180905; EP 3369382 A4 20181226; HK 1218504 A1 20170224; JP 2018531138 A 20181025; JP 6761866 B2 20200930; KR 102181339 B1 20201120; KR 20180066235 A 20180618; RU 2688294 C1 20190521; WO 2017071605 A1 20170504

DOCDB simple family (application)
US 201715655844 A 20170720; AU 2016347143 A 20161027; BR 112017023279 A 20161027; CN 201510718719 A 20151029; CN 2016103485 W 20161027; EP 16859040 A 20161027; HK 16106588 A 20160608; JP 2018540201 A 20161027; KR 20187014111 A 20161027; RU 2018119513 A 20161027